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| APPLICATION NO. FILING DATE | | ILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. | |
|-----------------------------|----------|-------------|----------------------|-------------------------|------------------|--|
| 10/092,768 | | 03/07/2002 | Dieter Kress | 2147.GLE.PT | 2147.GLE.PT 8295 | |
| 26986 | 7590 | 07/01/2003 | | | | |
| | | NT COMPAGNI | EXAMINER | | | |
| 136 SOUTH SUITE 700 | I MAIN S | TREET | WALSH, BRIAN D | | | |
| SALT LAKE CITY, UT 84101 | | | | ART UNIT | PAPER NUMBER | |
| | | | | 3722 | | |
| | | | | DATE MAILED: 07/01/2003 | 9 | |

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | Application No. | Applicant(s) | <i>O</i> j | | | | | |
|--|--|--|--|--------------|--|--|--|--|--|
| | • | • | KRESS ET AL. | | | | | | |
| | Office Action Summary | 10/092,768 Examiner | | | | | | | |
| | • • • • • • • • • • • • • • • • • • • | | Art Unit | | | | | | |
| · | The MAILING DATE of this communication app | Brian D. Walsh pears on the cover sheet wi | th the correspondence address | | | | | | |
| Period fo | | | | | | | | | |
| THE - Exte after - If the - If NC - Failu - Any | ORTENED STATUTORY PERIOD FOR REPL' MAILING DATE OF THIS COMMUNICATION. msions of time may be available under the provisions of 37 CFR 1.1 SIX (6) MONTHS from the mailing date of this communication. period for reply specified above is less than thirty (30) days, a reply period for reply is specified above, the maximum statutory period or to reply within the set or extended period for reply will, by statute reply received by the Office later than three months after the mailing and patent term adjustment. See 37 CFR 1.704(b). | 36(a). In no event, however, may a r y within the statutory minimum of thin will apply and will expire SIX (6) MON , cause the application to become AB | eply be timely filed y (30) days will be considered timely. THS from the mailing date of this communic ANDONED (35 U.S.C. § 133). | cation. | | | | | |
| 1)⊠ | Responsive to communication(s) filed on 07 / | <u> March 2002</u> . | | | | | | | |
| 2a) <u></u> □ | This action is FINAL . 2b)⊠ Th | is action is non-final. | | | | | | | |
| 3) | closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. | | | | | | | | |
| · · | ion of Claims | | | | | | | | |
| • | Claim(s) <u>9-28</u> is/are pending in the application | | | | | | | | |
| | 4a) Of the above claim(s) is/are withdrawn from consideration. | | | | | | | | |
| · _ | Claim(s) is/are allowed. | | | | | | | | |
| · | ☑ Claim(s) <u>9-28</u> is/are rejected. | | | | | | | | |
| · | Claim(s) is/are objected to. | | | | | | | | |
| • | Claim(s) are subject to restriction and/o ion Papers | r election requirement. | | | | | | | |
| 9)[| The specification is objected to by the Examine | r. | | | | | | | |
| 10)🖾 | The drawing(s) filed on <u>07 March 2002</u> is/are: a | a)□ accepted or b)⊠ object | ed to by the Examiner. | | | | | | |
| _ | Applicant may not request that any objection to th | | | | | | | | |
| 11) ☐ The proposed drawing correction filed on is: a) ☐ approved b) ☐ disapproved by the Examiner. | | | | | | | | | |
| If approved, corrected drawings are required in reply to this Office action. | | | | | | | | | |
| ,— | The oath or declaration is objected to by the Ex | aminer. | | | | | | | |
| Priority (| under 35 U.S.C. §§ 119 and 120 | | | | | | | | |
| • " | Acknowledgment is made of a claim for foreign | n priority under 35 U.S.C. | § 119(a)-(d) or (f). | | | | | | |
| a) | ⊠ All b)☐ Some * c)☐ None of: | | | | | | | | |
| | 1. Certified copies of the priority document | s have been received. | | | | | | | |
| | 2. Certified copies of the priority document | s have been received in A | pplication No | | | | | | |
| * (| 3. ☐ Copies of the certified copies of the prio application from the International Bu See the attached detailed Office action for a list | reau (PCT Rule 17.2(a)). | _ | ; | | | | | |
| 14) 🗌 A | Acknowledgment is made of a claim for domesti | ic priority under 35 U.S.C. | § 119(e) (to a provisional appli | ication). | | | | | |
| | The translation of the foreign language pro Acknowledgment is made of a claim for domest | • • | | | | | | | |
| Attachmen | t(s) | | | _ | | | | | |
| 2) Notic | ce of References Cited (PTO-892) ce of Draftsperson's Patent Drawing Review (PTO-948) mation Disclosure Statement(s) (PTO-1449) Paper No(s) <u>6</u> | 5) Notice of | Summary (PTO-413) Paper No(s) Informal Patent Application (PTO-152) | | | | | | |
| C Botont and T | rademark Office | | | | | | | | |

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DETAILED ACTION

Drawings

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the prism clamping lug of claims 17, 23 and 28 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered. The Examiner notes that a clamping lug is shown, but no structure was found in any of the drawings, clamping lug or otherwise, that would qualify as a prism or even substantially prismatic in configuration.

Similarly, the "grooves" of claim 26 must be shown or deleted from the claims.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 17 and 20 - 28 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The claims will be examined as best understood.

Claims 17, 23 and 28 include a limitation that the clamping lug is configured as a prism. However, The New Merriam-Webster Dictionary defines a "prism" as "A solid whose sides are

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parallelograms and whose ends are parallel and alike in shape and size." The element referred to as a "prism" clamping lug in the drawings, element 13, clearly has rounded sides which eliminates it as a prism. It also appears in the drawing that the clamping lug does not have ends that are alike in shape and size.

Claims 20 and 24 begin with "A tool according to claim for material-removing..." It appears that these claims were modified from a previously dependent claim and were intended to be independent. For purposes of this examination claims 20 and 24 were assumed to be independent and written as "A tool for material-removing..."

Regarding claim 26, "grooves" lacks proper antecedent basis. The Examiner notes that a single groove is disclosed in claim 24, not a plurality of grooves.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 3. Claims 9, 15, 17 19 and 26 are rejected under 35 U.S.C. 102(b) as being anticipated by Jones et al.

Regarding claim 9, Jones et al. discloses a cutting insert and clamping arrangement for a cutting tool system comprising a blade plate (hereinafter "cutting insert") (22) held by a clamping lug (hereinafter "clamp") (42), the cutting insert having a front side (24, referred to as a

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"top wall" by Jones et al.) and a groove (38) provided on the front side in which the clamp engages (Col. 2, lines 42 – 44).

Regarding claims 15 and 26, it is clear in figure 2 that the groove (38) extends over the entire width of the cutting insert (22).

Regarding claim 17, Jones et al. discloses a clamp (42) that is configured as a prism.

Regarding claim 18, Jones et al. discloses the base body (10) has a projection (14) in the area of the cutting insert which serves as a support.

Regarding claim 19, Jones et al. discloses the base body is configured as one piece (see figure 1).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 4. Claims 10, 11, 20, 21 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jones et al. in view of Minshall.

Regarding claims 10, 11 and 20 Jones et al. discloses all of the elements as set forth in the above rejections, however, Jones et al. fails to specifically set forth the dimensional characteristics regarding the transverse groove in the top surface of the cutting insert.

Regarding claims 21 and 23, Jones et al. discloses the elements as set forth in the above rejections.

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Minshall discloses a cutting insert (21) including a groove (32) on the top (31) of the insert that has angle of approximately 10°. Please refer to figure 4.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the groove in the cutting insert of Jones et al. to have an angle of about 10° as taught by Minshall since Minshall inherently teaches the use of this angle to provide a surface to engage a clamping arrangement in order retain the insert within the tool.

Furthermore, Jones et al. discloses the same invention except for the specific dimensional characteristics of the groove (angles). It would have been obvious to one of ordinary skill in the art at the time the invention was made to select whatever groove dimensions were appropriate since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimal or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

5. Claims 12, 16 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jones et al in view of Alexander.

Jones et al. discloses all of the elements as set forth in the above rejections, however, Jones et al. fails to disclose the cutting insert, viewed from above, is essentially in triangular form.

Alexander discloses a variety of cutting insert shapes as well as a variety of cutting insert recess shapes for a clamping arrangement in a tool holder. Alexander discloses a cutting insert (10) with a recess for a clamping arrangement having walls of the recess that are sloped in a cutting insert that is configured essentially as a triangle (see figures 1, 4 and 5) (Col. 5, lines 18 –

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21). Furthermore, it is clear in figures 1, 4 and 5 that the recess lies within an incircle of the cutting insert.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the modify the insert of Jones et al. to be of an essentially triangular shape, or any other shape for that matter, since Alexander teaches the shape of an insert will vary depending on the specific needs of the application (Col. 5, lines 18 - 21).

6. Claims 13, 14, 22, 25, 27 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jones et al. in view of Alexander and in further view of Minshall.

Regarding claims 13, 14 and 25, Jones et al. and Alexander disclose all of the elements as set forth in the above rejections, however, Jones et al. and Alexander fail to specifically set forth the dimensional characteristics regarding the transverse groove in the top surface of the cutting insert.

Regarding claims 22, 27 and 28, Jones et al. and Alexander discloses all of the elements as set forth in the above rejections.

Minshall discloses a cutting tool system similar to the instant invention wherein a cross-sectional view of the cutting insert (see figure 4) clearly shows a groove (32) that is approximately 10°.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the groove in the cutting insert of Jones et al. or the recess of Alexander to have an angle of about 10° as taught by Mapal since Mapal inherently teaches the use of this angle to provide a surface to engage a clamping arrangement in order retain the insert within the tool.

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Furthermore, Jones et al. and Alexander disclose the same invention except for the specific dimensional characteristics of the groove (angles). It would have been obvious to one of ordinary skill in the art at the time the invention was made to select whatever groove dimensions were appropriate since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimal or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Fors, McCreery, Luck, Lyon et al., "Mapal Fab Praezision" (German Patent Application No. DE 19521599 A1), Kress and Erickson all disclose insert clamping arrangements similar to the instant invention.

Faxing of Responses to Office Actions

8. In order to reduce pendency and avoid potential delays, TC 3700 is encouraging FAXing of responses to Office Actions directly into the Group at (703) 872-9302. This practice may be used for filing papers not requiring a fee. It may also be used for filing papers which require a fee by applicants who authorize charges to a PTO deposit account. Please identify the Examiner and art unit at the top of your cover sheet. Papers submitted via FAX into TC 3700 will be promptly forwarded to the Examiner.

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9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian Walsh whose telephone number is (703) 605-0638. The examiner can normally be reached on Monday - Friday 7:30 A.M. to 4:00 P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrea Wellington can be reached on (703) 308-2159. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9302 for regular communications and (703) 872-9303 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1148.

BDW

June 25, 2003

. WELLINGTON

SUPERVISORY PATENT EXAMINER TECHNOLOGY CENTER 3700